

INDEX

	PAGE		PAGE
A _g : Photoelectric cross-sections of gamma rays in Cu, Ag & Pt ...	385	Aminobenzoic acid: Phases in the structure of <i>o</i> -aminobenzoic acid ...	166
Ag-doped: Thermoelectric properties of Ag-doped manganese telluride ...	61	Aminopyridines: Vibrational & electronic spectra of 2-, 3- & 4-aminopyridines & deuterated analogues ...	104
XYZ type molecules: Force constants & Coriolis coupling constants of some linear XYZ type molecules ...	469	Ammonium uranyl sulphate: Absorption spectrum of ammonium uranyl sulphate ...	231
Absorption spectrum of ammonium uranyl sulphate	231	Amplifier An amplifier using integrated thin-film passive components ...	301
Absorption spectrum of 1,4-naphthoquinone in the vapour phase ...	187	Analogue techniques: Luminance pre-determination by digital, analogue & model techniques ...	394
Electronic absorption spectra of the three isomeric ethyl phenols ...	206	ANAND, S. C. <i>see</i> JOSHI, BHAIKAV D. ...	656
Intensity & solvent effect on absorption spectra of some anhydro salts ...	694	ANANTHAKRISHNAN, S. <i>see</i> ALURKAR, S. K. ...	7
Near ultraviolet absorption spectra of <i>o</i> - & <i>m</i> -bromoanilines in the vapour state ...	25	Anhydro salts: Intensity & solvent effect on absorption spectra of some anhydro salts ...	694
Near ultraviolet emission & absorption spectra of <i>p</i> -chlorophenol ...	344	Anilines, hydroxy: Dielectric dispersion in <i>o</i> - & <i>m</i> -hydroxy anilines ...	426
On the emission & absorption spectra of β -fluoronaphthalene vapour ...	398	Anisal <i>p</i> -aminoazobenzene: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal <i>p</i> -aminoazobenzene ...	713
Ultraviolet absorption spectrum of germanium monoxide molecule ...	183	Anisaldehyde molecules: Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -anisaldehyde molecules in liquid state ...	440
Acentric crystals: Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ...	256	ANSARI, B. J.: Electronic spectra of isomeric methylstyrenes ...	614
Acetone-chloroform: Investigations on dielectric behaviour of acetone-chloroform & diethylether-chloroform mixtures at microwave frequencies ...	10	Infrared absorption spectra of isomeric bromostyrenes ...	89
Achromatic filter for the near infrared region ...	581	Vibrational & electronic spectra of isomeric bromostyrenes ...	49
AGASHE, V. V.: On the emission mechanisms of 5577 & 6300 Å. lines of the night airglow in the tropics ...	447	Antiproton-nucleon interactions: Preliminary analysis of 5 GeV/c antiproton-nucleon interactions in photographic emulsions ...	154
Aggregate emission in uraniu solutions ...	238	Arc-heater: Enthalpy distribution in plasma tube arc-heater ...	583
AGNIHOTRI, V. B.: Thermoluminescence study of CaS:Zr phosphors ...	70	Argon plasma: Radial electron density & energy distribution profiles in a cylindrical steady state argon plasma in the presence of small r.f. signal perturbation ...	130
AGRAWAL, M. P.: Computation of thermal conductivity of sandstones by considering them as unconsolidated sands ...	388	Arsenate ion: Ultraviolet absorption in arsenate ion in aqueous solution state ...	386
AGRAWAL, V. D. <i>see</i> GUPTA, R. C. ...	678	ARULDHAS, G. <i>see</i> UNNIKRISHNAN NAYAR, V. ...	126, 521
Agrimeter for measurement of atmospheric electric potential gradients ...	31	Aspartic acid: Crystal structure of DL-aspartic acid by the symbolic addition method ...	523
Ahmedabad: Polarization of 164 kc/s. radio wave transmissions from Tashkent received at Ahmedabad ...	7	Atmospheric electric gradients: Agrimeter for measurement of atmospheric electric potential gradients ...	31
Air: Variation of striking & extinction voltage of low pressure a.c. & d.c. metal electrode discharge in air ...	621	Atomic numbers: Effective atomic numbers in compounds ...	574
Air showers: An improved experimental arrangement to study geomagnetic effect of extensive air showers	307	Effective atomic numbers of alloys for pair production process ...	643
Alkali halides: Elastic constants of NaCl type alkali halides ...	517	Studies on the effective atomic numbers in alloys for gamma ray interactions in the energy region 100-662 keV. ...	609
Alkali halide diatomic molecules: A new potential function for alkali halide diatomic molecules ...	173	AVADHANULU, M. N. <i>see</i> GOPALAKRISHNA, C. V. S. S. V. ...	713
Alkali halide molecules: Interatomic potential & certain properties of alkali halide & hydride molecules ...	102	AYYANGAR, K. M. M. S. <i>see</i> NARASIMHA RAO, B. V. ...	358
Alkali hydride molecules: Interatomic potential & certain properties of alkali halide & hydride molecules ...	102	Azobenzene-2-sulphenyl cyanide: Theoretical estimation of dipole moment of azobenzene-2-sulphenyl cyanide ...	703
Alkali sulphate crystals: Colour centre studies in certain alkali sulphate crystals: Part I—Optical absorption in irradiated sodium sulphate ...	73	BeF molecule: Franck-Condon factors & <i>r</i> -centroids for ($A^2\Pi-X^2\Sigma$) system of BeF molecule ...	458
Alloys: Effective atomic numbers of alloys for pair production process ...	643	BiBr molecule: Emission spectrum of the <i>A-X</i> system of BiBr molecule ...	299
Studies on the effective atomic numbers in alloys for gamma ray interactions in the energy region 100-662 keV. ...	609	BiCl molecule: Rotational analysis of the bands of the <i>A'-X</i> system of BiCl molecule ...	494
Alloy junction transistor: Minority carrier lifetime in alloy junction transistor in magnetic field ...	304	BiI molecule: Emission spectrum of BiI molecule ...	445
Nature of inverse α of an alloy junction transistor	631	Back-diffusion correction: The <i>N</i> -stage swing-separator: The evaluation of the back-diffusion correction for various modes of sample withdrawal & its application to diffusion measurements ...	471
Alpha-particles: Effective mass of alpha-particles in a superfluid nuclear matter ...	390	BALASUBRAMANIAN, S.: Matrices of Γ_6 , Γ_7 & Γ_8 representations with valence band eigen functions of Ge or Si as basis functions ...	399
Alpha reaction: Triple alpha reaction at high temperatures ...	263	Ballistics of guns: Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function ...	379
ALURKAR, S. K.: Polarization of 164 kc/s. radio wave transmissions from Tashkent received at Ahmedabad ...	7		
AMAR SINGH <i>see</i> SHARMA, D. ...	346		

Band spectrum of diatomic cadmium iodide in the visible region 4130-4800 Å ...	342	Thermally stimulated currents in CaS : Ce phosphors ...	646
Band-tail spreading energy: A laser method for determining the band-tail spreading energy in degenerate semiconductors ...	249	CaS : Zr phosphor: Thermoluminescence study of CaS : Zr phosphors ...	70
BANDOPADHYAYA, T. K.: Photo-dielectric effect in zinc sulphide film doped with Cu & Cl ...	289	^{12}CH molecule: Franck-Condon factors & r -centroids for the $C \rightarrow X$ band system of the ^{12}CH molecule ...	443
Study of phase transitions of D-camphor from dielectric relaxation studies ...	286	Cl: Photo-dielectric effect in zinc sulphide film doped with Cu & Cl ...	289
BANSAL, J. L. see VERMA, P. D. ...	506	CN cycle: $^{14}\text{N}(p, \gamma)^{15}\text{O}$ reaction in the CN cycle ...	389
BARBARA, A. K.: Theoretical estimation of dipole moment of azobenzene-2-sulphenyl cyanide ...	703	$\text{CoMn}_x\text{Fe}_{(2-x)}\text{O}_4$: Charge distribution in the mixed oxide systems: $\text{ZnMn}_x\text{Fe}_{(2-x)}\text{O}_4$ & $\text{CoMn}_x\text{Fe}_{(2-x)}\text{O}_4$...	211
Basis functions: Matrices of Γ_6 , Γ_7 , & Γ_8 representations with valence band eigen functions of Fe or Si as basis functions ...	399	Cu: Photo-dielectric effect in zinc sulphide film doped with Cu & Cl ...	289
Benzene: Ultrasonic relaxation in mixtures of oxygen with carbon dioxide & benzene ...	322	Photoelectric cross-sections of gamma rays in Cu, Ag & Pt ...	385
BERA, R.: Stability of thin plates under edge thrust due to large deflections, buckling being resisted by a force proportional to the displacement ...	202	CuCl: Vibrational transition probabilities & r -centroids of diatomic molecules: Band systems of CuCl ...	396
BHAMAMBAL, (Miss) P. see VENKATESWARLU, K. ...	467, 530	Cadmium iodide: Band spectrum of diatomic cadmium iodide in the visible region 4130-4800 Å ...	342
BHANDARI, R. C. see AGRAWAL, M. P. ...	388	Caesium halides: Lattice dynamics & Raman spectra of caesium halides & rubidium chloride ...	407
see CHAUDHARY, D. R. ...	135, 274	Calcium fluoride: Thermoluminescence dosimetry with natural calcium fluoride powder ...	294
BHARTI, P. L. see HARSH VARDHAN ...	301	Calcium sulphamates: Raman & infrared spectra of sodium & calcium sulphamates ...	686
BHASKARA RAO, A.: An improved experimental arrangement to study geomagnetic effect of extensive air showers ...	307	D-Camphor: Study of phase transitions of D-camphor from dielectric relaxation studies ...	286
BHATNAGAR, A. S. see TEWARI, S. G. ...	33	Carbon dioxide: Ultrasonic relaxation in mixtures of oxygen with carbon dioxide & benzene ...	322
BHATTI, S. S. see KOR, S. K. ...	101	Carboxylic acid-water mixtures: Anomalous variation of dielectric properties of carboxylic acid-water mixtures ...	430
BHIDE, G. K. see RANGARAJAN, L. M. ...	668	Variation of proton relaxation time in carboxylic acid-water mixtures ...	292
BHUILE, V. V. see PADHYE, M. R. ...	104	Cellular structure in tin single crystals ...	252
BHUTANI, K. K. see GHOSH, S. N. ...	146	Centric crystals: Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ...	256
BHUTRA, M. P. see TANDON, S. P. ...	694	Ceramics, doped lead titanate: Studies of some doped lead titanate ceramics ...	591
BHUYAN, H. R. see DEKA, G. C. ...	251, 479	Cerenkov counter: Development of a water Cerenkov counter ...	634
Binary liquid mixtures: Ultrasonic studies of binary liquid mixtures ...	393	Cesium-antimonide photocathode: Processing of cesium-antimonide photocathode ...	668
Birefringence: New technique to study the dispersion of natural birefringence in uniaxial & biaxial crystals	367	CHACHRA, S. P. see MAHALANABIS, APARNA ...	55
Optical transmission & birefringence of colloidal Fe_3O_4 in a magnetic field ...	364	CHAKRAVARTI, A. N.: A laser method for determining the band-tail spreading energy in degenerate semiconductors ...	249
Booth's lemniscate: Slow stationary viscous flow past a surface of revolution of Booth's lemniscate ...	40	Temperature dependence of the linewidth of spontaneous emission in laser diodes ...	47
BORGOHAIN, P. see KRORI, K. D. ...	53, 674	Charge, effective: Dipole moment & effective charge of diatomic ionic molecules ...	152
BORLE, W. N.: Growth of silicon filamentary crystals from solution ...	576	Charge carriers: Radial & longitudinal distribution of charge carriers in a diffusion controlled plasma ...	190
Boron halides: Molecular constants of mixed boron halides ...	467	Charge distribution in the mixed oxide systems: $\text{ZnMn}_x\text{Fe}_{(2-x)}\text{O}_4$ & $\text{CoMn}_x\text{Fe}_{(2-x)}\text{O}_4$...	211
Boundary value problems: On certain asymmetric mixed boundary value problems of an electrified circular disc situated inside a coaxial infinite hollow cylinder ...	44	Charge transfer & dielectric behaviour of K_2NiF_4 single crystals at room temperature ...	665
Breakdown voltage: Increase in breakdown voltage with peak value of applied a.c. in a low pressure glow discharge in neon ...	312	CHATTERJEE, (Miss) J. see DATTA, G. ...	625
Brewster-angle grinding of optical maser tubes ...	280	CHATTERJEE, R. N. see RAJAGOPALA RAO, P. ...	452
Bromine isomers under (n, γ) process ...	481	CHAUDHARY, D. R.: Effective thermal conductivity of two-phase granular materials ...	274
Bromoanilines: Near ultraviolet absorption spectra of <i>o</i> - & <i>m</i> -bromoanilines in the vapour state ...	25	Heat transfer through porous & disperse media ...	135
Bromobenzaldehydes: Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -bromobenzaldehydes ...	81	CHAUDHARY, H. R.: Finite torsion of a reinforced cylindrical tube of compressible elastic material ...	197
β -Bromophenetole: Electronic & infrared absorption spectra of β -bromophenetole ...	617	CHIDAMBARAM, R.: Trombay automatic diffractometers: A semi-automatic neutron diffractometer (SAND) ...	550
Bromostyrenes: Infrared absorption spectra of isomeric bromostyrenes ...	89	CHILPONKAR, V. T.: Particle concentration profiles in low temperature diffusion controlled gas discharge plasma ...	148
Vibrational & electronic spectra of isomeric bromostyrenes ...	49	Plasma parameters by r.f. conductivity measurements ...	128
Buckling: Stability of thin plates under edge thrust due to large deflections, buckling being resisted by a force proportional to the displacement ...	202	Radial electron density & energy distribution profiles in a cylindrical steady state argon plasma in the presence of small r.f. signal perturbation ...	130
$C \rightarrow X$ band system: Franck-Condon factors & r -centroids for the $C \rightarrow X$ band system of the ^{12}CH molecule ...	443	Radial & longitudinal distribution of charge carriers in a diffusion controlled plasma ...	190
C_{2v} symmetry molecules: Self-consistent-field one-centre expansion method for C_{2v} symmetry molecules: Part I—Analysis of the integrals ...	599	Radial particle distribution profile in a low temperature gas discharge plasma ...	649
CaBr: Ultraviolet emission spectrum of CaBr molecule ...	181		
CaS : Ce phosphor: Decay & thermoluminescence of CaS : Cs phosphor ...	67		

- CHILPONKAR, M. W.: Some comments on the accuracy of the estimated temperature distribution in the upper atmosphere from the intensity measurements of zenith sky during twilight ... 456
- CHITNIS, V. D.: Gamma ray energy absorption rates in iron & lead ... 361
- Chloroanthraquinone derivatives: Infrared spectra of some chloroanthraquinone derivatives ... 454
- Chlorobenzonitrile: Spectra of *p*-chlorobenzonitrile ... 84
- Chlorobenzotrifluorides: Electronic absorption spectra of three isomeric chlorobenzotrifluorides ... 205
- (Chloromethyl) naphthalene: Infrared absorption spectrum of 1-(chloromethyl) naphthalene ... 575
- Chlorophenol: The near ultraviolet emission & absorption spectra of *p*-chlorophenol ... 344
- Chlorotoluenes: Infrared absorption spectra of *o*- & *m*-chlorotoluenes ... 488
- Cholesteryl esters: Temperature variation of static dielectric constant in liquid crystals: Cholesteryl esters ... 375
- CHUGH, O. P.: Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function ... 379
- Closed circuit technique: A closed circuit technique for the measurement of radon/thoron ratio in soil-gas ... 33
- Clusters: Proton relaxation time & the asymmetry of the clusters about the rare earth ions in state of aqueous solution ... 132
- Coherence: Effect of coherence on three-photon absorption ... 111
- Coherence functions, fourth order: Determination of fourth order coherence functions ... 163
- Colour centre studies in certain alkali sulphate crystals: Part I—Optical absorption in irradiated sodium sulphate ... 73
- Components, passive: An amplifier using integrated thin-film passive components ... 301
- Constructional parameters: Tolerances for constructional parameters of Huygenian & Ramsden eyepiece systems ... 538
- Control systems: A paper & pencil design technique for a class of control systems ... 572
- Copper: Scattering cross-sections of gamma rays in copper ... 254
- Study of the fine structure associated with the *K* absorption discontinuity of copper ... 371
- Coriolis coupling coefficients: Force constants & Coriolis coupling constants of some linear XYZ type molecules ... 469
- Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of sulphur dicyanide ... 126
- Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of *trans*-nitrous acid ... 521
- Generalized mean square amplitudes & Coriolis coupling coefficients of $C_4H_8C_4D_8$ & C_4F_8 ... 530
- Correlation measure between the responses of two linear systems for transient input as a performance criterion for servomechanisms ... 564
- Couette flow: Heat transfer in crossed-fields MHD Couette flow ... 326
- Critical temperature of transition of nuclear matter Crystal field parameterization: The magnetic anisotropy & crystal field parameterization of Nd^{3+} ion in ethyl sulphate lattice ... 55
- Crystal structure of DL-aspartic acid by the symbolic addition method ... 523
- Crystal structure of glycine silver nitrate ... 51
- Refinement of the crystal structure of heat-treated monazite crystal ... 265
- Crystals: Charge transfer & dielectric behaviour of K_2NiF_6 single crystals at room temperature ... 665
- Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ... 256
- Etching solutions for revealing dislocations in KCl crystals ... 258
- Optical & electrical properties of Mn-doped KCl crystals ... 350
- Polytypism as a high order transformation in crystals ... 118
- Crystals, biaxial: A new technique to study the dispersion of natural birefringence in uniaxial & biaxial crystals ... 367
- Crystals, single: Cellular structure in tin single crystals Dielectric properties of thoroughly reduced rutile (TiO_2) single crystals ... 328
- Crystals, uniaxial: A new technique to study the dispersion of natural birefringence in uniaxial & biaxial crystals ... 367
- Currents: Thermally stimulated currents in CaS:Ce phosphors ... 646
- D_2O substitution: Role of impurities & D_2O substitution on fluorescence lifetimes of uranyl salts ... 219
- DARJI, A. B. *see* PATEL, M. M. ... 342
- DATT, S. C.: Temperature gradient for the growth of large single crystals of naphthalene ... 96
- DATTA, G.: Feedback frequency dividers ... 625
- Interrupted wave synchronization of pulsed oscillators ... 269
- DAVE, M. J.: Optical transmission & birefringence of colloidal Fe_3O_4 in a magnetic field ... 364
- DAYAL, B. *see* LAGU, (Mrs) MANIKARNIKA ... 670
- Daylight: The internal reflected component of daylight: A finite difference approach to the split flux method ... 100
- Decay & thermoluminescence of zirconium-activated strontium sulphide phosphors ... 346
- Decay curves: Correlation of the electron trap-depths as computed from the experimental decay & thermoluminescence curves ... 260
- Decay schemes of ^{161}Tb & ^{108}Ru ... 605
- Decharger: Design of a decharger for RCA Emu-2A electron microscope ... 518
- Deformations: Radial deformations in a compressible dielectric sphere ... 37
- DEKA, G. C.: Double emission of heavy fragments ($Z \geq 4$) at high energy interactions ... 251
- Emission of 'hammer' tracks in 20 GeV/c protons & 3.5 GeV/c Π -meson interactions with heavy nuclei of emulsions ... 479
- DEKA, K. C. *see* DEKA, G. C. ... 479
- Delayed coincidence spectrometer for lifetime studies ... 358
- DESAI, J. N. *see* DAVE, M. J. ... 364
- see* SHAH, H. S. ... 282
- DESAI, V. R. *see* CHILPONKAR, V. T. ... 130, 148
- DESHPANDE, V. T.: Thermal expansion of rubidium dihydrogen arsenate ... 97
- Deuterated analogues: Vibrational & electronic spectra of 2-, 3- & 4-aminopyridines & deuterated analogues Deuterons: Influence of deuterons on proton relaxation times in paramagnetic solutions ... 216
- DEVANARAYANAN, S.: Thermal expansion & ferroelectric transition in sodium trihydroselenite [$NaH_3(SeO_3)_2$] ... 542
- Thermal expansion of strontium titanate ... 714
- Diatomic molecule: Dependence of vibrational frequency of diatomic molecules on electronegativity ... 386
- Dipole moment & effective charge of diatomic ionic molecules ... 152
- Vibrational transition probabilities & *r*-centroids of diatomic molecules: Band systems of CuCl ... 396
- Dibarium zinc formate tetrahydrate: PMR in dibarium zinc formate tetrahydrate $ZnBa_2(HCOO)_6 \cdot 4H_2O$... 413
- Dibromobutane: Viscosity dependence of relaxation times of 1,3-dibromopropane & 1,4-dibromobutane Dibromopropane: Viscosity dependence of relaxation times of 1,3-dibromopropane & 1,4-dibromobutane ... 700
- Dichloroethylene: Absorption of microwaves in *cis*-1,2-dichloroethylene ... 14
- Dichlorotoluenes: Electronic absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ... 137
- Infrared absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ... 691
- Dielectric behaviour: Charge transfer & dielectric behaviour of K_2NiF_6 single crystals at room temperature ... 665

Investigations on dielectric behaviour of acetone-chloroform & diethylether-chloroform mixtures at microwave frequencies ...	10	Edge thrust: Stability of thin plates under edge thrust due to large deflections, buckling being resisted by a force proportional to the displacement ...	202
Dielectric constant: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal <i>p</i> -aminoazobenzene ...	713	Effective atomic numbers in compounds ...	574
Temperature variation of static dielectric constant in liquid crystals: Cholesteryl esters ...	375	Elastic constants: Comparison of the efficiency of different formulae in predicting elastic constants of polycrystals ...	577
Dielectric dispersion in <i>o</i> - & <i>m</i> -hydroxyanilines ...	426	Elastic constants of NaCl type alkali halides ...	517
Dielectric measurements: Study of hydrogen-bonded complexes in three mixtures from dielectric measurements ...	558	Elastic scattering: The elastic scattering of electrons by helium atoms at a low energy ...	461
Dielectric properties: Anomalous variation of dielectric properties of carboxylic acid-water mixtures ...	430	Electrets: Hysteresis effect in electrets ...	579
Dielectric properties of thoroughly reduced rutile (TiO ₂) single crystals ...	328	X-ray diffraction studies of electrets of different thicknesses ...	98
Dielectric relaxation in dilute polar liquids at microwave frequencies ...	561	Electrical conductivity measurements: Polymerization studies of oligomers by electric conductivity measurements ...	715
Dielectric relaxation in viscous solution of polar liquids at microwave frequencies ...	113	Electric fields: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal <i>p</i> -aminoazobenzene ...	713
Study of phase transitions of <i>p</i> -camphor from dielectric relaxation studies ...	286	Electric potential gradients: Agrimeter for measurement of atmospheric electric potential gradients ...	31
Dielectric sphere: Radial deformations in a compressible dielectric sphere ...	37	Electrical noise: Characteristics of electrical noise on extra high voltage transmission lines & their measurements ...	434
Diethylether-chloroform: Investigations on dielectric behaviour of acetone-chloroform & diethylether-chloroform mixtures at microwave frequencies ...	10	Electrical properties: Optical & electrical properties of Mn-doped KCl crystals ...	350
Diffractometers, neutron: Trombay automatic diffractometers: A semi-automatic neutron diffractometer (SAND) ...	550	Electrified circular disc: On certain asymmetric mixed boundary value problems of an electrified circular disc situated inside a coaxial infinite hollow cylinder	44
Diffusion controlled plasma: Radial & longitudinal distribution of charge carriers in a diffusion controlled plasma ...	190	Electroluminescence: Luminophors with two-band electroluminescence emission ...	78
Diffusion measurement: The <i>N</i> -stage swing-separator: The evaluation of the back-diffusion correction for various modes of sample withdrawal & its application to diffusion measurements ...	471	Electromagnetic waves: Intensity dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II — Quantum theory ...	109
Digital techniques: Luminance pre-determination by digital, analogue & model techniques ...	394	Electron density: Radial electron density & energy distribution profiles in a cylindrical steady state argon plasma in the presence of small r.f. signal perturbation ...	130
Dimethyl sulphoxide: Proton magnetic resonance study of dimethyl sulphoxide (DMSO) ...	392	Electron spin densities: Calculation of electron spin densities in certain methyl radicals ...	213
Diodes, tunnel: Fabrication of GaAs tunnel diodes & detection of its recombination radiation ...	420	Electron trap-depths: Correlation of the electron trap-depths as computed from the experimental decay & thermoluminescence curves ...	260
Dipolar liquids: Microwave absorption of mixtures of dipolar liquids in solutions ...	492	Electronegativity: Dependence of vibrational frequency of diatomic molecules on electronegativity ...	386
Dipole moment & effective charge of diatomic ionic molecules ...	152	Electronic absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ...	137
Dipole moments of some esters ...	16	Electronic absorption spectra of the three isomeric ethyl phenols ...	206
Theoretical estimation of dipole moment of azobenzene-2-sulphenyl cyanide ...	703	Electronic absorption spectra of three isomeric chlorobenzotrifluorides ...	205
Dirac equation: On the solution of the Dirac equation in a magnetic field ...	459	Electronic spectra: Electronic & infrared absorption spectra of β -bromophenetole ...	617
Discharge: Variation of striking & extinction voltage of low pressure a.c. & d.c. metal electrode discharge in air ...	621	Electronic spectra of isomeric methylstyrenes ...	614
Dislocations: Etching solutions for revealing dislocations in KCl crystals ...	258	Vibrational & electronic spectra of 2-, 3- & 4-aminopyridines & deuterated analogues ...	104
Dispersion: A new technique to study the dispersion of natural birefringence in uniaxial & biaxial crystals ...	367	Vibrational & electronic spectra of isomeric bromostyrenes ...	49
Note on Rayleigh's expression for dispersion between <i>F</i> & <i>C</i> lines for small angled prisms ...	452	Electrons: Elastic scattering of electrons by helium atoms at a low energy ...	461
Dispersion curves of sodium chloride on the basis of the simple shell model ...	670	Higher order thermal diffusion of electrons in ionized gases ...	329
Dispersions: Optical transmission through dispersions of graphite in a magnetic field ...	282	Incoherent scattering of 1002 keV. gamma rays by <i>K</i> -shell electrons in Sn, Sm, Ta & Pb ...	255
Doped lead titanate ceramics: Studies of some doped lead titanate ceramics ...	591	Emission mechanisms: On the emission mechanisms of 5577 & 6300 Å. lines of the night airglow in the Tropics ...	447
Double emission of heavy fragments (<i>Z</i> ≥ 4) at high energy interactions ...	251	Emission of light: Harmonic generation in emission of light ...	161
Dual input networks utilizing RC ladders ...	647	Emission spectrum: Emission spectra & species in uranin solutions ...	19
DUBE, D. C. see YADAVA, R. S. ...	10	Emission spectrum of the <i>A-X</i> system of BiBr molecule ...	299
DUBOV, G. A. see KEERTI, (Miss) S. ...	258	Emission spectrum of BiI molecule ...	445
DUORAH, H. L. see DUORAH, K. ...	263, 389	Emission spectrum of <i>p</i> -fluorophenol ...	151
DUORAH, K.: ¹⁴ N(<i>p</i> , γ) ¹⁶ O reaction in the CN cycle ...	389	Emission spectrum of <i>p</i> -Br molecule ...	384
Triple alpha reaction at high temperatures ...	263	Near ultraviolet emission & absorption spectra of <i>p</i> -chlorophenol ...	344
DWIVEDI, C. P. D.: Near ultraviolet absorption spectrum of <i>N</i> -ethylaniline vapour ...	141	On the emission & absorption spectra of β -fluoronaphthalene vapour ...	398
Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -anisaldehyde molecules in liquid state ...	440	Sensitized emission spectra of quinones ...	91

	PAGE		PAGE
Ultraviolet emission spectrum of CaBr molecule	181	Force field mean square amplitudes of vibration & Coriolis coupling coefficients of sulphur dicyanide	126
Emulsions of 'hammer' tracks in 20 GeV./c protons & 3.5 GeV./c Π -meson interactions with heavy nuclei of emulsions	479	Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of <i>trans</i> -nitrous acid	521
Preliminary analysis of 5 GeV./c antiproton-nucleon interactions in photographic emulsions	154	Forced convection in laminar flow between two parallel walls & in a circular pipe with suction	506
Energy absorption: Gamma ray energy absorption rates in iron & lead	361	Form function: Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function	379
Energy distribution profiles: Radial electron density & energy distribution profiles in a cylindrical steady state argon plasma in the presence of small r.f. signal perturbation	130	Franck-Condon factors & r -centroids for ($A^1\Pi-X^2\Sigma$) system of BeF molecule	458
Energy region 100-662 keV.: Studies on the effective atomic numbers in alloys for gamma ray interactions in the energy region 100-662 keV.	609	Franck-Condon factors & r -centroids for the $C\rightarrow X$ band system of the ^{12}CH molecule	443
Enthalpy distribution in plasma tube arc-heater	583	Free electrons: Intensity-dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II—Quantum theory	109
Esters: Dipole moments of some esters	16	Frequency-demultiplication: Experimental investigation of subharmonics or frequency-demultiplication in physical systems	499
Etching solutions for revealing dislocations in KCl crystals	258	Frequency distribution function: Calculation of the frequency distribution function & the specific heat for sodium & potassium	93
Ethyl phenols: Electronic absorption spectra of the three isomeric ethyl phenols	206	Frequency dividers: Feedback frequency dividers	625
Ethyl pyridine: Infrared spectra of 2-ethyl pyridine & 4-ethyl pyridine	262	Frequency shift: Intensity-dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II—Quantum theory	109
Ethyl sulphate lattice: The magnetic anisotropy & crystal field parameterization of Nd^{3+} ion in ethyl sulphate lattice	55	Fuchs-Sondheimer's theory: Film thickness determination by the methods based on Fuchs-Sondheimer's theory	437
N-Ethylaniline vapour: The near ultraviolet absorption spectrum of N-ethylaniline vapour	141		
F occurrences: Latitude variation of times of maximum $h'F$ & spread F occurrences	319	G aAs tunnel diodes: Fabrication of GaAs tunnel diodes & detection of its recombination radiation	420
F-region: Distribution of positive ions in the F-region of the ionosphere	176	Gd: Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th	642
F_2 -region: Effect of magnetic activity on horizontal drifts in the F_2 -region at Waltair	149	Ge: Matrices of Γ_6 , Γ_7 & Γ_8 representations with valence band eigen functions of Ge or Si as basis functions	399
F & C lines: Note on Rayleigh's expression for dispersion between F & C lines for small angled prisms Fe_3O_4 , colloidal: Optical transmission & birefringence of colloidal Fe_3O_4 in a magnetic field	452	Gadolinium-64: New quadrupole transitions in the L-spectrum of gadolinium-64	644
Fading records: P' - f_c curve from short wave fading records near maximum usable frequency	708	Gamma ray energy absorption rates in iron & lead	361
Feedback frequency dividers	625	Gamma ray interactions: Studies on the effective atomic numbers in alloys for gamma ray interactions in the energy region 100-662 keV.	609
Ferro-spins: On the quadrupole splitting of Mössbauer spectra in ferro-spins	105	Gamma rays: Incoherent scattering of 1002 keV. gamma rays by K -shell electrons in Sn, Sm, Ta & Pb	255
Ferroelectric transition: Thermal expansion & ferroelectric transition in sodium trihydroselenite [$\text{NaH}_2(\text{SeO}_3)_2$]	542	Photoelectric cross-sections of gamma rays in Cu, Ag & Pt	385
Field-dependent mobility: Theory of field-dependent mobility in semiconductors	401	Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th	642
Field emission concept: Explanation of photocurrents in rutile (TiO_2) single crystal based on the field emission concept	598	Scattering cross-sections of gamma rays in copper	254
Filamentary crystals: Growth of silicon filamentary crystals from solution	576	GARG, J. D. <i>see</i> MEHROTRA, R. R.	708
Film thickness determination by the methods based on Fuchs-Sondheimer's theory	437	Gas density: Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function	379
Finite difference approach: The internal reflected component of daylight: A finite difference approach to the split flux method	100	Gas discharge plasma: Radial particle distribution profile in a low temperature gas discharge plasma	649
Fluid flows: On kinematic properties of hydromagnetic fluid flows	382	Gaussian potential: On scattering by modified Gaussian potential	674
Fluorimeter, phase: Design characteristics of a phase fluorimeter for the study of lifetimes of molecules	236	Geomagnetic effect: An improved experimental arrangement to study geomagnetic effect of extensive air showers	307
Fluorescence decay: Temperature dependence of fluorescence decay of uranyl salts	122	Germanium: Surface states' relaxation times in n -type germanium	64
Fluorescence lifetimes: Role of impurities & D_2O substitution on fluorescence lifetimes of uranyl salts	219	Germanium monoxide: Ultraviolet absorption spectrum of germanium monoxide molecule	183
4-Fluoro-3-chloro aniline: The near ultraviolet absorption spectrum of 4-fluoro-3-chloro aniline	229	Germanium p - n junctions: Observations on the reverse V - I characteristics of low breakdown voltage diffused germanium p - n junctions	150
Fluoroaniline: Infrared absorption & ultraviolet emission spectra of p -fluoroaniline	698	GHIKE, G. A. <i>see</i> KHER, V. G.	312
Infrared spectrum of m -fluoroaniline	144	GHOSH, P. C. <i>see</i> TEWARI, S. G.	33
Fluoronaphthalene: On the emission & absorption spectra of β -fluoronaphthalene vapour	398	GHOSH, S. N.: Spectra of N_2 excited by proton bombardment	146
p -Fluorophenol: Emission spectrum of p -fluorophenol	151	GHOUSE, K. M.: Refinement of the crystal structure of heat-treated monazite crystal	265
Fluorostyrene: Infrared spectrum of p -fluorostyrene	519	GILL, P. S. <i>see</i> BHASKARA RAO, A.	307
Force constants & Coriolis coupling constants of some linear XYZ type molecules	469	GIRIJA, (Miss) M. <i>see</i> NARASIMHAM, K. V.	231

	PAGE		PAGE
Glow discharge: Increase in breakdown voltage with peak value of applied a.c. in a low pressure glow discharge in neon ...	312	Horizontal drifts: Effect of magnetic activity on horizontal drifts in the F_2 -region at Waltair ...	149
Glycine silver nitrate: Crystal structure of glycine silver nitrate ...	51	Huygenian eyepiece system: Tolerances for constructional parameters of Huygenian & Ramsden eyepiece systems ...	538
GOHEL, V. B.: A new potential function for alkali halide diatomic molecules ...	173	Huygenian type, lens systems: Primary aberrations of two-lens systems of Huygenian type ...	531
Applicability of the Wasastjerna potential function for evaluating physical parameters ...	171	Hydrogen-bonded complexes: Study of hydrogen-bonded complexes on three mixtures from dielectric measurements ...	558
Gold-199: Radioactive decay of gold-199 ...	223	Hydromagnetic fluid: On kinematic properties of hydromagnetic fluid flows ...	382
GOPALAKRISHNA, C. V. S. S. V.: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal <i>p</i> -aminoazobenzene ...	713	Hysteresis: Physical basis of a mechanism of hysteresis in phase transformations ...	207
Temperature variation of static dielectric constant in liquid crystals: Cholesteryl esters ...	375	Hysteresis effect in electrets ...	579
GOSWAMI, A.: Study on semiconducting properties of vacuum deposited tellurium films ...	416		
GOYAL, M. L. <i>see</i> SRIVASTAVA, G. P. ...	14	¹¹⁵In : Spin assignment to some levels of ¹¹⁵ In ...	50
GRAIS, KHAIRI I.: Plate-to-plate effect on the darkening of Ilford Q_2 plate as an ion-detector in quantitative mass spectrography ...	711	Ilford Q_2 plate: Plate-to-plate effect on the darkening of Ilford Q_2 plate as an ion detector in quantitative mass spectrography ...	711
Granular materials: Effective thermal conductivity of two-phase granular materials ...	274	Impedance of a cylindrical plasma capacitor ...	464
Graphite: Optical transmission through dispersions of graphite in a magnetic field ...	282	India: Radio climatic charts over India during January & August ...	208
Green's function analysis: Molecular constants of some tetrahedral XY_4 type molecules & their substituted derivatives by Green's function analysis ...	651	Refractivity in the lowest 1 km. over India ...	315
GUPTA, R. C.: Proton resonance study of the effects of methyl groups substitution & their reorientations in some solids ...	678	Inductive element: A variable inductive element of infinite Q ...	47
GUPTA, U. C.: Design, construction & performance of a flat type magnetic beta ray spectrometer ...	354	Infrared absorption spectrum of 1-(chloromethyl) naphthalene ...	575
		Infrared absorption spectra of <i>o</i> - & <i>m</i> -chlorotoluenes ...	488
		Infrared absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ...	691
		Infrared absorption spectra of isomeric bromostyrenes ...	89
		Infrared absorption spectra & ultraviolet emission spectra of <i>p</i> -fluoroaniline ...	698
		The electronic & infrared absorption spectra of β -bromophenetole ...	617
		Infrared region: An achromatic filter for the near infrared region ...	581
		Infrared spectra of 2-ethyl pyridine & 4-ethyl pyridine ...	262
		Infrared spectrum of <i>m</i> -fluoroaniline ...	144
		Infrared spectrum of <i>p</i> -fluorostyrene ...	519
		Infrared spectra of some chloroanthraquinone derivatives ...	454
		Raman & infrared spectra of sodium & calcium sulphamates ...	686
		Intensity & solvent effect on absorption spectra of some anhydro salts ...	694
		Interatomic potential & certain properties of alkali halide & hydride molecules ...	102
		Interferometer, ultrasonic: A composite ultrasonic interferometer ...	638
		Inverse α : Nature of inverse α of an alloy junction transistor ...	631
		Ion detector: Plate-to-plate effect on the darkening of Ilford Q_2 plate as an ion detector in quantitative mass spectrography ...	711
		Ion source: Studies on the vacuum vibrator ion source ...	706
		Ionic solids: On the thermal expansion & melting of ionic solids ...	672
		Ionized gases: Higher order thermal diffusion of electrons in ionized gases ...	329
		Ionosphere: Distribution of positive ions in the F-region of the ionosphere ...	176
		Ions, positive: Distribution of positive ions in the F-region of the ionosphere ...	176
		Iron: Gamma ray energy absorption rates in iron & lead ...	361
		Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function ...	379
		Isotropic bodies: Finite strain in transverse isotropic bodies ...	194
Hf : Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th ...	642	J AGATH KUMAR, V. R.: Latitude variation of times of maximum $h'F$ & spread F occurrences ...	319
¹⁷⁷ Hf: Lifetimes of 321 & 113 keV. level of ¹⁷⁷ Hf ...	555	JAI PRAKASH <i>see</i> SURESH CHANDRA ...	116
HNO ₃ : Normal coordinate treatment of HNO ₃ in the vapour & the liquid states ...	4		
Half-life of the 181 keV. level of ⁹⁹ Tc ...	553		
Hammer tracks: Emission of 'hammer' tracks in 20 GeV./c protons & 3.5 GeV./c Π^- -meson interactions with heavy nuclei of emulsions ...	479		
HARANADH, C. <i>see</i> GOPALAKRISHNA, C. V. S. S. V. ...	375		
<i>see</i> RAJYAM, B. S. ...	16		
HARIDASAN, T. M.: Lattice dynamics & Raman spectra of caesium halides & rubidium chloride ...	407		
HARIHARAN, N.: Colour centre studies in certain alkali sulphate crystals: Part I—Optical absorption in irradiated sodium sulphate ...	73		
HARI MOHAN <i>see</i> MAJUMDAR, K. ...	183		
<i>see</i> SADGURU PRAKASH ...	78		
HARI PRAKASH: Harmonic generation in emission of light ...	161		
Intensity dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II—Quantum theory ...	109		
One-photon & two-photon photo-pion production ...	155		
Harmonic generation in emission of light ...	161		
HARSH VARDHAN: An amplifier using integrated thin-film passive components ...	301		
Heat transfer in crossed-fields MHD Couette flow ...	326		
Heat transfer through porous & disperse media ...	135		
Heavy atoms: Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ...	256		
Heavy fragments: Double emission of heavy fragments ($Z \geq 4$) at high energy interactions ...	251		
Heavy nuclei: Emission of 'hammer' tracks in 20 GeV./c protons & 3.5 GeV./c Π^- -meson interactions with heavy nuclei of emulsions ...	479		
Helium atoms: The elastic scattering of electrons by helium atoms at a low energy ...	461		
High energy interactions: Double emission of heavy fragments ($Z \geq 4$) at high energy interactions ...	251		
High voltage transmission lines: Characteristics of electrical noise on extra high voltage transmission lines & their measurement ...	434		

	PAGE		PAGE
JNANANANDA, SWAMI <i>see</i> NARASIMHA RAO, B. V.	358, 555	KRISHNAMURTHY, N. <i>see</i> HARIDASAN, T. M.	407
<i>see</i> RADHAKRISHNA MURTY, V.	223, 605	KRISHNAMURTY, BH. <i>see</i> SASTRY, G. L. N.	637
<i>see</i> RAMALINGA REDDY, A.	255	KRISHNAMURTY, T.: Study of temperature variation of ultrasonic velocity in molten state	247
JOG, R. H. <i>see</i> GOSWAMI, A.	416	KRISHNAN, R. S. <i>see</i> KATIVAR, R. S.	686
JOSHI, BHAIKAV D.: Overlap matrix elements & related integrals involving r_{12}^k type correlation function for H_3^+ in one-centre expansion approximation	656	KRORI, K. D.: On partial wave analysis of Morse scattering	53
Self-consistent-field one-centre expansion method for C_{2v} symmetry molecules: Part I—Analysis of the integrals	599	On scattering by modified Gaussian potential	674
JOSHI, N. V. <i>see</i> MANDE, CHINTAMANI	371	KSHIRSAGAR, S. R. <i>see</i> KHER, V. G.	621
JOSHI, R. K. <i>see</i> NAIN, V. P. S.	471		
JOSHI, S. B. <i>see</i> CHIPLONKAR, V. T.	190, 649		
K absorption: Study of the fine structure associated with the K absorption discontinuity of copper	371	L -spectrum of gadolinium-64: New quadrupole transitions in the L -spectrum of gadolinium-64	644
K -shell electrons: Incoherent scattering of 1002 keV. gamma rays by K -shell electrons in Sn, Sm, Ta & Pb	255	La: Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th	642
KCl crystals: Etching solutions for revealing dislocations in KCl crystals	258	LACHMAN DASS: Interatomic potential & certain properties of alkali halide & hydride molecules	102
Optical & electrical properties of Mn-doped KCl crystals	350	Ladders: Dual input null networks utilizing RC ladders	647
K_2NiF_4 single crystals: Charge transfer & dielectric behaviour of K_2NiF_4 single crystals at room temperature	665	LAGU, (Mrs) MANIKARNIKA: Dispersion curves of sodium chloride on the basis of the simple shell model	670
KACHHAVA, C. M.: Dipole moment & effective charge of diatomic ionic molecules	152	LAKSHMINARAYANA, G. <i>see</i> SARMA, K. S.	37
KALRA, SATYA PAL: Enthalpy distribution in plasma tube arc-heater	583	LAKSHMINARAYANA, V. <i>see</i> RAMA RAO, M. T.	553
KAMAL, A. A. <i>see</i> PADMAVATHI, S. V.	154	<i>see</i> RAMALINGA REDDY, A.	255
KAMRA, A. K.: Agrimeter for measurement of atmospheric electric potential gradients	31	LAL, A.: Bromine isomers under (n, γ) process	481
Local potential gradient developed during excess point-discharge current	640	LAL, H. B.: Charge transfer & dielectric behaviour of K_2NiF_4 single crystals at room temperature	665
KAPOOR, O. S. <i>see</i> NIGAM, A. N.	644	Dielectric properties of thoroughly reduced rutile (TiO_2) single crystals	328
KATIVAR, R. S.: Raman & infrared spectra of sodium & calcium sulphamates	686	Explanation of photocurrents in rutile (TiO_2) single crystal based on the field emission concept	598
KATTI, M. R.: Franck-Condon factors & r -centroids for ($A^2\Pi-X^2\Sigma$) system of BeF molecule	458	Laminar flow: Forced convection in laminar flow between two parallel walls & in a circular pipe with suction	506
KAW, P. K. <i>see</i> SHARMA, S.	329	Steady laminar flow of viscoelastic fluid through parallel & uniformly porous walls of different permeability	512
KEERTI, (Miss) S.: Etching solutions for revealing dislocations in KCl crystals	258	Lande potential: Transport properties of plasma using shielded Lande potential	588
KERIMOV, B. K.: Polarization dependence of elastic lepton (anti-lepton) nucleon electromagnetic scattering	58	Laser: A laser method for determining the band-tail spreading energy in degenerate semiconductors	249
KESAVA RAO, B.: Finite strain in transverse isotropic bodies	194	Laser diodes: Temperature dependence of the linewidth of spontaneous emission in laser diodes	47
KESAVA RAO, P. S.: Effect of magnetic activity on horizontal drifts in the F_2 -region at Waltair	149	Latitude variation of times of maximum $h'F$ & spread F occurrences	319
KHAN, A. A. <i>see</i> DESHPANDE, V. T.	97	Lattice dynamics & Raman spectra of caesium halides & rubidium chloride	407
KHAN, M. Y.: Phases in the structure of α -aminobenzoic acid	166	Lead: Gamma ray energy absorption rates in iron & lead	361
KHANNA, K. M.: Critical temperature of transition of nuclear matter	1	Lead titanate ceramics, doped: Studies of some doped lead titanate ceramics	591
Effective mass of alpha-particles in a superfluid nuclear matter	390	Lens systems: Primary aberrations of two-lens systems of Huygenian type	531
KHANNA, S. L.: Hysteresis effect in electrets	579	Lepton: Polarization dependence of elastic lepton (anti-lepton) nucleon electromagnetic scattering	58
X-ray diffraction studies of electrets of different thicknesses	98	Lifetime: Minority carrier lifetime in alloy junction transistor in magnetic field	304
KHER, V. G.: Increase in breakdown voltage with peak value of applied a.c. in a low pressure glow discharge in neon	312	Lifetime studies: Delayed coincidence spectrometer for lifetime studies	358
Variation of striking & extinction voltage of low pressure a.c. & d.c. metal electrode discharge in air	621	Lifetimes of 321 & 113 keV. levels of ^{177}Hf	555
Kinematic properties: On kinematic properties of hydromagnetic fluid flows	382	Lifetimes of molecules: Design characteristics of a phase fluorometer for the study of lifetimes of molecules	236
KOR, S. K.: Evaluation of diffusion controlled rate constants for magnesium sulphate	101	Light fluctuations: Two-photon absorption & light fluctuations	334
KRISHNA, P. <i>see</i> RAI, KAILASH NATH	118	Linear systems: The correlation measure between the responses of two linear systems for transient input as a performance criterion for servomechanisms	564
KRISHNA MOHANA RAO, J.: Crystal structure of glycine silver nitrate	51	Linewidth: Temperature dependence of the linewidth of spontaneous emission in laser diodes	47
KRISHNA PILLAI, M. G.: Molecular force field for some XY_3 type molecules	404	Liquid crystal phase: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal p -aminoazobenzene	713
KRISHNA RAO, P. S. R. <i>see</i> RAGHUPATHI RAO, C.	638	Liquid crystals: Temperature variation of static dielectric constant in liquid crystals: Cholesteryl esters	375
KRISHNAMURTHY, B. S.: Theory of field dependent mobility in semiconductors	401	Liquids: Thickness of the surface layer of liquids	517
		Lithium salts: Ultrasonic velocity & allied parameters in aqueous solutions of lithium salts	75

	PAGE		PAGE
Ultrasonic velocity & allied parameters in non-aqueous solutions of a few lithium salts ...	422	MEHROTRA, V. K.: Electronic absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ...	137
Local potential gradient developed during excess point-discharge current ...	640	Electronic absorption spectra of the three isomeric ethyl phenols ...	206
LOKRE, V. L.: A simple milliohm meter ...	496	Infrared absorption spectra of 2,4-, 2,5- & 2,6-dichlorotoluenes ...	691
Luminance pre-determination by digital, analogue & model techniques ...	394	MEHTA, P. C. <i>see</i> TANDON, S. P. ...	694
Luminescence behaviour of uranium activated rubidium fluoride ...	580	MEHTA, R. V. <i>see</i> DAVE, M. J. ...	364
Luminophors with two-band electroluminescence emission ...	78	II-Meson: Emission of 'hammer' tracks in 20 GeV/c protons & 3.5 GeV/c II-meson interactions with heavy nuclei of emulsions ...	479
MHD: Heat transfer in crossed-fields MHD Couette flow ...	326	Metal electrode discharge: Variation of striking & extinction voltage of low pressure a.c. & d.c. metal electrode discharge in air ...	621
Mn-doped: Optical & electrical properties of Mn-doped KCl crystals ...	350	Meteorite activity: Visual meteorite activity over Waltair — Survey during November, December & January 1964-67 ...	377
Magnesium sulphate: Evaluation of diffusion controlled rate constants for magnesium sulphate ...	101	Methanol-d ₄ : Microwave spectrum of methanol-d ₄ ...	641
Magnetic activity: Effect of magnetic activity on horizontal drifts in the F ₂ -region at Waltair ...	149	Methyl groups substitution: Proton resonance study of the effects of methyl groups substitution & their reorientations in some solids ...	678
Magnetic anisotropy of ruthenium(III) acetylacetonate	596	Methyl radicals: Calculation of electron spin densities in certain methyl radicals ...	213
The magnetic anisotropy & crystal field parameterization of Nd ³⁺ ion in ethyl sulphate lattice ...	55	Methylstyrenes: Electronic spectra of isomeric methylstyrenes ...	614
Magnetic field: Influence of magnetic & electric fields on the dielectric constant of the liquid crystal phase of anisal <i>p</i> -aminoazobenzene ...	713	Microwave, absorption: Absorption of microwaves in <i>cis</i> -1,2-dichloroethylene ...	14
Minority carrier lifetime in alloy junction transistor in magnetic field ...	304	Microwave absorption of mixtures of dipolar liquids in solutions ...	492
On the solution of the Dirac equation in a magnetic field ...	459	Microwave frequencies: Dielectric relaxation in dilute polar liquids at microwave frequencies ...	561
Optical transmission & birefringence of colloidal Fe ₃ O ₄ in a magnetic field ...	364	Dielectric relaxation in viscous solution of polar liquids at microwave frequencies ...	113
Optical transmission through dispersions of graphite in a magnetic field ...	282	Investigations on dielectric behaviour of acetone-chloroform & diethylether-chloroform mixtures at microwave frequencies ...	10
Magnetic properties of phosphors ...	209	Microwave spectrum of methanol-d ₄ ...	641
MAHADEVAN, (Mrs) SUDHA: Observations on the reverse <i>V</i> - <i>I</i> characteristics of low breakdown voltage diffused germanium <i>p</i> - <i>n</i> junctions ...	150	Milliohm meter: A simple milliohm meter ...	496
MAHALANABIS, APARNA: The magnetic anisotropy & crystal field parameterization of Nd ³⁺ ion in ethyl sulphate lattice ...	55	Minority carrier lifetime in alloy junction transistor in magnetic field ...	304
MAHANTA, P. C. <i>see</i> BARBARA, A. K. ...	703	MISRA, MAHESHWAR: Minority carrier lifetime in alloy junction transistor in magnetic field ...	304
MAITREYA, V. K. <i>see</i> NARASIMHAN, V. ...	100, 394	<i>see</i> PRASAD, HARISH CHANDRA ...	631
MAJHI, JAGABANDHU <i>see</i> RAMASASTRY, C. ...	64	MISRA, S. C.: An approximate partition function for monatomic liquids ...	451
MAJUMDAR, K.: Ultraviolet absorption spectrum of germanium monoxide molecule ...	183	<i>see</i> GUPTA, U. C. ...	354
MALATHY DEVI, (Miss) V. <i>see</i> RUDRA WARRIAR, M. K. ...	469	Mixed salt solutions: Ultrasonic parameters in mixed salt solutions ...	637
MALHOTRA, G. L.: Design of a decharger for RCA Emu-2A electron microscope ...	518	Model techniques: Luminance pre-determination by digital analogue & model techniques ...	394
MANDE, CHINTAMANI: Study of the fine structure associated with the K absorption discontinuity of copper ...	371	MOHANTY, B. S.: Rotational analysis of the bands of the A'-X system of BiCl molecule ...	494
Manganese telluride: Thermoelectric properties of Ag-doped manganese telluride ...	61	Molal volume: Evaluation of apparent molal expansibility from apparent molal volume ...	248
Maser tubes, optical: Brewster-angle grinding of optical maser tubes ...	280	Molecular constants of mixed boron halides ...	467
Mass: Effective mass of alpha-particles in a superfluid nuclear matter ...	390	Molecular constants of some tetrahedral XY ₄ type molecules & their substituted derivatives by Green's function analysis ...	651
Mass spectrography: Plate-to-plate effect on the darkening of Ilford Q ₂ plate as an ion detector in quantitative mass spectrography ...	711	Molecular force field for some XY ₃ type molecules ...	404
MATHUR, H. B. <i>see</i> YAGNIK, C. M. ...	211	Molecules, diatomic ionic: Dipole moment & effective charge of diatomic ionic molecules ...	152
MATHUR, K. C.: An achromatic filter for the near infrared region ...	581	Molecules, spherical: A new method for determining the relaxation time from polarizability plot: Part I — Nearly spherical molecules ...	116
MATHUR, P. C. <i>see</i> SRIVASTAVA, G. P. ...	113, 561	MOMIN, S. N. <i>see</i> CHIDAMBARAM, R. ...	550
MATHUR, V. K.: Correlation of the electron trap-depths as computed from the experimental decay & thermoluminescence curves ...	260	Monatomic liquids: An approximate partition function for monatomic liquids ...	451
Elastic constants of NaCl type alkali halides ...	517	Monazite: Refinement of the crystal structure of heat-treated monazite crystal ...	265
<i>see</i> SINGH, S. P. ...	386	Monsoon depressions: Radio refractive index variations associated with monsoon depressions ...	244
<i>see</i> VIJ, D. R. ...	67, 646	MOOKHERJI, A.: Proton relaxation time & the asymmetry of the clusters about the rare earth ions in state of aqueous solution ...	132
Matrices of Γ _g , Γ _u & Γ _g representations with valence band eigen functions of Ge or Si as basis functions ...	399	MOOKHERJI, T. <i>see</i> MOOKHERJI, A. ...	132
MEHENDRU, P. C.: Optical & electrical properties of Mn-doped KCl crystals ...	350	Morse scattering: On partial wave analysis of Morse scattering ...	53
MEHROTRA, R. R.: P'-f _c curve from short wave fading records near maximum usable frequency ...	708	Mössbauer spectra: On the quadrupole splitting of Mössbauer spectra in ferro-spinels ...	105
		MURTY, C. R. K. <i>see</i> GOPALAKRISHNA, C.V. S. S. V. ...	375, 713
		<i>see</i> RAJYAM, B. S. ...	16

- N₂**: Spectra of N₂ excited by proton bombardment 146
¹⁴N(p, γ)¹⁵O reaction in the CN cycle ... 389
 (*n*, γ) process: Bromine isomers under (*n*, γ) process ... 481
 NaCl: Elastic constants of NaCl type alkali halides 517
 Nd³⁺ ion: The magnetic anisotropy & crystal field parameterization of Nd³⁺ ion in ethyl sulphate lattice ... 55
 NAIK, Y. G. *see* DAVE, M. J. ... 364
 see PARIKH, D. O. ... 437
 see SHAH, H. S. ... 282
 NAIN, V. P. S.: The *N*-stage swing-separator: The evaluation of the back-diffusion correction for various modes of sample withdrawal & its application to diffusion measurements ... 471
 NAIR, K. P. R. *see* MOHANTY, B. S. ... 494
 see RAO, (Miss) D. V. R. A. ... 396
 NAMBI, K. S. V.: Thermoluminescence dosimetry with natural calcium fluoride powder ... 294
 Naphthalene: Temperature gradient for the growth of large single crystals of naphthalene ... 96
 1,4-Naphthoquinone: Absorption spectrum of 1,4-naphthoquinone in the vapour phase ... 187
 NARASIMHA MURTY, A. *see* SAROJINI, G. ... 558
 NARASIMHA RAO, B. V.: Delayed coincidence spectrometer for lifetime studies ... 358
 Lifetimes of 321 & 113 keV. levels of ¹⁷⁷Hf ... 555
 NARASIMHAM, A. V.: Ultrasonic absorption in mixtures of non-associated liquids ... 484
 NARASIMHAM, K. V.: Absorption spectrum of ammonium uranyl sulphate ... 231
 NARASIMHAMURTY, T. S.: A new technique to study the dispersion of natural birefringence in uniaxial & biaxial crystals ... 367
 NARASIMHAN, V.: Luminance pre-determination by digital, analogue & model techniques ... 394
 The internal reflected component of daylight: A finite difference approach to the split flux method ... 100
 NARAYANAN, P. S.: Thermal expansion & ferroelectric transition in sodium trihydroselenite [NaH₃(SeO₃)₂] *see* DEVANARAYANAN, S. ... 542
 ... 714
 NARESH CHANDRA: Determination of fourth order coherence functions ... 163
 Effect of coherence on three-photon absorption ... 111
 Two-photon absorption & light fluctuations ... 334
 Neon: Increase in breakdown voltage with peak value of applied a.c. in a low pressure glow discharge in neon ... 312
 Neutron diffractometer: Trombay automatic diffractometers: A semi-automatic neutron diffractometer (SAND) ... 550
 NIGAM, A. N.: New quadrupole transitions in the *L*-spectrum of gadolinium-64 ... 644
 NIGAM, G. D.: Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ... 256
 Night airglow: On the emission mechanisms of 5577 & 6300 Å. lines of the night airglow in the tropics ... 447
 Nitrous acid: Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of trans-nitrous acid ... 521
 Non-aqueous solutions: Ultrasonic velocity & allied parameters in non-aqueous solutions of a few lithium salts ... 422
 Non-associated liquids: Ultrasonic absorption in mixtures of non-associated liquids ... 484
 Nonlinear control system: A method for nonlinear control system design ... 569
 Nonlinear system analysis: A new numerical technique for nonlinear system analysis ... 501
 Normal coordinate treatment of HNO₃ in the vapour & the liquid states ... 4
 Nuclear emulsions: Scattering factors in nuclear emulsions ... 645
 Nuclear matter: Effective mass of alpha-particles in a superfluid nuclear matter ... 390
 Nuclear transition: Critical temperature of transition of nuclear matter ... 1
 Nucleon: Polarization dependence of elastic lepton (anti-lepton) nucleon electromagnetic scattering ... 58
 Null networks: Dual input null networks utilizing RC ladders ... 647
Oligomers: Polymerization studies of oligomers by electric conductivity measurements ... 715
 One-body interactions: The effect of one-body interactions on the transition temperature of superconductors ... 546
 One-centre expansion approximation: Molecular matrix elements & related integrals involving r_{12}^k type correlation function for H₃ in one-centre expansion approximation ... 656
 One-centre expansion method: Self-consistent-field one-centre expansion method for C_{2v} symmetry molecules: Part I — Analysis of the integrals ... 599
 Optical absorption: Colour centre studies in certain alkali sulphate crystals: Part I — Optical absorption in irradiated sodium sulphate ... 73
 Optical properties: Optical & electrical properties of Mn-doped KCl crystals ... 350
 Optical transmission & birefringence of colloidal Fe₃O₄ in a magnetic field ... 364
 Optical transmission through dispersions of graphite in a magnetic field ... 282
 Oscillators, pulsed: Interrupted wave synchronization of pulsed oscillators ... 269
 Overlap matrix elements & related integrals involving r_{12}^k type correlation function for H₃ in one-centre expansion approximation ... 651
 Oxide systems: Charge distribution in the mixed oxide systems: ZnMn₂Fe(2-x)O₄ & CoMn₂Fe(2-x)O₄ ... 211
 Oxygen: Ultrasonic relaxation in mixtures of oxygen with carbon dioxide & benzene ... 322
P'-*fc* curve from short wave fading records near maximum usable frequency ... 708
 Pb: Incoherent scattering of 1002 keV. gamma rays by K-shell electrons in Sn, Sm, Ta & Pb ... 255
 PbBr molecule: Emission spectrum of PbBr molecule ... 384
 PMR: Proton magnetic resonance study of dimethyl sulphoxide (DMSO) ... 392
 PMR in dibarium zinc formate tetrahydrate ZnBa₂(HCOO)₆·4H₂O ... 413
 PMR of zinc acetate dihydrate Zn(CH₃COO)₂·2H₂O ... 259
 Pt: Photoelectric cross-sections of gamma rays in Cu, Ag & Pt ... 385
 PADHYE, M. R.: Vibrational & electronic spectra of 2-, 3- & 4-aminopyridines & deuterated analogues ... 104
 PADMAVATHI, G.: Influence of deuterons on proton relaxation times in paramagnetic solutions ... 216
 Variation of proton relaxation time in carboxylic acid-water mixtures ... 292
 PADMAVATHI, S. V.: Preliminary analysis of 5 GeV./c antiproton-nucleon interactions in photographic emulsions ... 154
 Pair production: Effective atomic numbers of alloys for pair production process ... 643
 PANDE, D. N. *see* PANT, D. D. ... 122
 PANDEY, B. R.: Spectra of *p*-chlorobenzonitrile ... 84
 PANDEY, S. M.: Infrared spectra of 2-ethyl pyridine & 4-ethyl pyridine ... 262
 PANT, D. D.: Aggregate emission in uranin solutions Design characteristics of a phase fluorometer for the study of lifetimes of molecules ... 236
 Role of impurities & D₂O substitution on fluorescence lifetimes of uranyl salts ... 219
 Temperature dependence of fluorescence decay of uranyl salts ... 122
 see SANWAL, D. N. ... 580
 PANT, H. C.: Emission spectra & species in uranin solutions ... 19
 see PANT, D. D. ... 122, 219, 238
 PANT, M. C. *see* SRIVASTAVA, H. N. ... 208
 PANWAR, V. S. *see* MALHOTRA, G. L. ... 518

	PAGE		PAGE
Paper & pencil design technique: A paper & pencil design technique for a class of control systems ...	572	Radial particle distribution profile in a low temperature gas discharge plasma ...	649
Paramagnetic solutions: Influence of deuterons on proton relaxation times in paramagnetic solutions ...	216	Transport properties of plasma using shielded Lande potential ...	588
PARAMESWARAN PILLAI, P. <i>see</i> KRISHNA PILLAI, M. G.	404	Plasma capacitor: The impedance of a cylindrical plasma capacitor ...	464
PARDIKER, P. G. <i>see</i> DESHPANDE, V. T.	97	Plates, thin: Stability of thin plates under edge thrust due to large deflections, buckling being resisted by a force proportional to the displacement ...	201
PARIKH, D. O.: Film thickness determination by the methods based on Fuchs-Sondheimer's theory ...	437	Point-discharge current: Local potential gradient developed during excess point-discharge current ...	640
PARSHAD, R.: Physical basis of a mechanism of hysteresis in phase transformations ...	207	Polar gases: Calculation of viscosities of mixtures containing polar gases ...	475
<i>see</i> YADAVA, R. S.	10	Polar liquids: Dielectric relaxation in dilute polar liquids at microwave frequencies ...	561
PARTHASARADHI, K.: Effective atomic numbers in compounds ...	574	Dielectric relaxation in viscous solution of polar liquids at microwave frequencies ...	113
Photoelectric cross-sections of gamma rays in Cu, Ag & Pt ...	385	Polarizability plot: A new method for determining the relaxation time from polarizability plot: Part I—Nearly spherical molecules ...	116
Scattering cross-sections of gamma rays in copper	254	Polarization of 164 kc/s. radio wave transmissions from Tashkent received at Ahmedabad ...	7
Studies on the effective atomic numbers in alloys for gamma ray interactions in the energy region 100-662 keV. ...	609	Polycrystals: Comparison of the efficiency of different formulae in predicting elastic constants of polycrystals ...	577
<i>see</i> RAMALINGA REDDY, A.	255	Polymerization studies of oligomers by electric conductivity measurements ...	715
<i>see</i> VISWESWARA RAO, V.	642	Polytypism as a high order transformation in crystals	118
Partial wave analysis: On partial wave analysis of Morse scattering ...	53	Potassium: Calculation of the frequency distribution function & the specific heat for sodium & potassium ...	93
Particle concentration profiles in low temperature diffusion controlled gas discharge plasma ...	148	Potential function: A new potential function for alkali halide diatomic molecules ...	173
Partition functions: An approximate partition function for monatomic liquids ...	451	Applicability of the Wasastjerna potential function for evaluating physical parameters ...	171
PATEL, M. M.: Band spectrum of diatomic cadmium iodide in the visible region 4130-4800 Å. ...	342	PRABHAKARA REDDY, Y.: Ultraviolet emission of CaBr molecule ...	181
PATEL, S. P. <i>see</i> PATEL, M. M.	342	PRAKASH, V. <i>see</i> BORLE, W. N.	576
PATHAK, A. N. <i>see</i> SHARMA, D.	443	PRASAD, HARISH CHANDRA: Nature of inverse α of an alloy junction transistor ...	631
PATHAK, K. M.: Development of a water Cerenkov counter ...	634	PRASAD, J.: Accuracy in radius of curvature measurements with ring spherometer ...	29
Phase transformations: Physical basis of a mechanism of hysteresis in phase transformations ...	207	Primary aberrations of two-lens systems of Huygenian type ...	531
Phase transitions: Study of phase transitions of D-camphor from dielectric relaxation studies ...	286	Prisms, small angled: Note on Rayleigh's expression for dispersion between F & C lines for small angled prisms ...	452
Phases in the structure of o-aminobenzoic acid ...	166	Proton bombardment: Spectra of N ₂ excited by proton bombardment ...	146
Phenols, ethyl: Electronic absorption spectra of the three isomeric ethyl phenols ...	206	Proton relaxation time: Influence of deuterons on proton relaxation times in paramagnetic solutions	216
Photocathode: Processing of cesium-antimonide photocathode ...	668	Proton relaxation time & the asymmetry of the clusters about the rare earth ions in state of aqueous solution ...	132
Photocurrents: Explanation of photocurrents in rutile (TiO ₂) single crystal based on the field emission concept ...	598	Variation of proton relaxation time in carboxylic acid-water mixtures ...	292
Photo-dielectric effect in zinc sulphide film doped with Cu & Cl ...	289	Proton resonance study of the effects of methyl groups substitution & their reorientations in some solids	678
Photoelectric cross-sections of gamma rays in Cu, Ag & Pt ...	385	Protons, 20 GeV./c: Emission of 'hammer' tracks in 20 GeV./c protons & 3.5 GeV./c π^- -meson interactions with heavy nuclei of emulsions ...	479
Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th ...	642	PRUSTY, SARBESHWAR: A new numerical technique for nonlinear system analysis ...	501
Phosphor: Decay & thermoluminescence of CaS: Ce phosphor ...	67	Pulsed oscillators: Interrupted wave synchronization of pulsed oscillators ...	269
Decay & thermoluminescence of zirconium-activated strontium sulphide phosphors ...	346	PURNACHANDRA RAO, B.: Mean amplitudes of vibrations: Pyramidal XYZ ₃ type molecules ...	339
Luminescence behaviour of uranium activated rubidium fluoride phosphor ...	580	PURUSHOTHAM, G.: On kinematic properties of hydro-magnetic fluid flows ...	382
Magnetic properties of phosphors ...	209		
Thermally stimulated currents in CaS: Ce phosphors ...	646		
Thermoluminescence study of CaS: Zr phosphors	70		
Photo-pion production: One-photon & two-photon photo-pion production ...	155		
Photon: Effect of coherence on three-photon absorption	111		
Two-photon absorption & light fluctuations ...	334		
Physical systems: Experimental investigations of sub-harmonics or frequency-demultiplication in physical systems ...	499		
Plasma: Enthalpy distribution in plasma tube arc-heater ...	583		
Impedance of a cylindrical plasma capacitor	464		
Particle concentration profiles in low temperature diffusion controlled gas discharge plasma ...	148		
Plasma parameters by r.f. conductivity measurements ...	128		
Radial & longitudinal distribution of charge carriers in a diffusion controlled plasma ...	190		
Radial electron density & energy distribution profiles in a cylindrical steady state argon plasma in the presence of small r.f. signal perturbation ...	130		
		Q, infinite: A variable inductive element of infinite Q ...	47
		Quadratic form function: Isothermal solution of ballistics of guns with a more realistic gas density for a general quadratic form function ...	379
		Quadrupole splitting: On the quadrupole splitting of Mössbauer spectra in ferro-spinels ...	105
		Quadrupole transitions: New quadrupole transitions in the L-spectrum of gadolinium-64 ...	644

	PAGE		PAGE
Quantum theory: Intensity dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II—Quantum theory ...	109	Raman spectra: Lattice dynamics & Raman spectra of caesium halides & rubidium chloride ...	407
Quinones: Sensitized emission spectra of quinones ...	91	Raman & infrared spectra of sodium & calcium sulphamates ...	686
RC ladders: Dual input null networks utilizing RC ladders ...	647	RAMANADHAM, M.: Thickness of the surface layer of liquids ...	517
RCA Emu-2A electron microscope: Design of a de-charger for RCA Emu-2A electron microscope ...	518	RAMASTASTRY, C.: Surface states' relaxation times in <i>n</i> -type germanium ...	64
¹⁰³ Ru: Decay schemes of ¹⁶¹ Tb and ¹⁰³ Ru ...	605	RAMASWAMY, K.: Molecular constants of some tetrahedral XY ₄ type molecules & their substituted derivatives by Green's function analysis ...	651
<i>r</i> -Centroids: Franck-Condon factors & <i>r</i> -centroids for (<i>A</i> ² Π- <i>X</i> ² Σ) system of BeF molecule ...	458	Ramsden eyepiece system: Tolerances for constructional parameters of Huygenian & Ramsden eyepiece systems ...	538
Franck-Condon factors & <i>r</i> -centroids for the <i>C</i> → <i>X</i> band system of the ¹² CH molecule ...	443	RANADE, J. D.: Magnetic properties of phosphors ...	209
Vibrational transition probabilities & <i>r</i> -centroids of diatomic molecules: Band systems of CuCl ...	396	see AGNIHOTRI, V. B. ...	70
r.f. conductivity measurements: Plasma parameters by r.f. conductivity measurements ...	128	RANGANATHAN, V. see RAMASYAMY, K. ...	651
RADHAKRISHNA MURTY, V.: Decay schemes of ¹⁶¹ Tb & ¹⁰³ Ru ...	605	RANGARAJAN, L. M.: Processing of cesium-antimonide photocathode ...	668
Radioactive decay of gold-199 ...	223	RAO, (Miss) D. V. R. A.: Vibrational transition probabilities & <i>r</i> -centroids of diatomic molecules: Band systems of CuCl ...	396
Radial particle distribution profile in a low temperature gas discharge plasma ...	649	Rare earth ions: Proton relaxation time & the asymmetry of the clusters about the rare earth ions in state of aqueous solution ...	132
Radiation, recombination: Fabrication of GaAs tunnel diodes & detection of its recombination radiation ...	420	Rate constants: Evaluation of diffusion controlled rate constants for magnesium sulphate ...	101
Radio climatic charts over India during January & August ...	208	Rayleigh's expression: Note on Rayleigh's expression for dispersion between <i>F</i> & <i>C</i> lines for small angled prisms ...	452
Radio refractive index variations associated with monsoon depressions ...	244	RAZDAN, K. N. see MATHUR, V. K. ...	260
Radio wave transmission: Polarization of 164 kc/s. radio wave transmissions from Tashkent received at Ahmedabad ...	7	Refractivity in the lowest 1 km. over India ...	315
Radioactive decay of gold-199 ...	223	Relaxation time: A new method for determining the relaxation time from polarizability plot: Part I—Nearly spherical molecules ...	116
Radius of curvature: Accuracy in radius of curvature measurements with ring spherometer ...	29	Surface states' relaxation times in <i>n</i> -type germanium ...	64
Radon/thoron ratio: A closed circuit technique for the measurement of radon/thoron ratio in soil-gas ...	33	Viscosity dependence of relaxation times of 1,3-dibromopropane & 1,4-dibromobutane ...	700
RAGHAVENDRA RAO, C.: Proton magnetic resonance study of dimethyl sulphoxide (DMSO) ...	392	Representations, Γ ₆ , Γ ₇ & Γ ₈ : Matrices of Γ ₆ , Γ ₇ & Γ ₈ representations with valence band eigen functions of Ge or Si as basis functions ...	399
RAGHUPATHI RAO, C.: A composite ultrasonic interferometer ...	638	RIESZ, R. P.: Brewster-angle grinding of optical maser tubes ...	280
RAI, D. K. see RAO, (Miss) D. V. R. A. ...	396	Ring spherometer: Accuracy in radius of curvature measurements with ring spherometer ...	29
RAI, KAILASH NATH: Polyttypism as a high order transformation in crystals ...	118	Rotational analysis of the bands of the <i>A</i> ² - <i>X</i> system of BiCl molecule ...	494
RAJAGOPALA RAO, P.: Note on Rayleigh's expression of dispersion between <i>F</i> & <i>C</i> lines for small angled prisms ...	452	ROY, AMULYA CHANDRA: The elastic scattering of electrons by helium atoms at a low energy ...	461
RAJESWARA RAO, N.: Normal coordinate treatment of HNO ₃ in the vapour & the liquid states ...	4	ROY, D. K.: Fabrication of GaAs tunnel diodes & detection of its recombination radiation ...	420
RAJVANSHI, S. C.: Steady laminar flow of viscoelastic fluid through parallel & uniformly porous walls of different permeability ...	512	ROY-CHOUDHURY, PHANIBHUSAN: Studies of some doped lead titanate ceramics ...	591
RAJYAM, B. S.: Dipole moments of some esters ...	16	Rubidium chloride: Lattice dynamics & Raman spectra of caesium halides & rubidium chloride ...	407
RAM PRASAD: Primary aberrations of two-lens systems of Huygenian type ...	531	Rubidium dihydrogen arsenate: Thermal expansion of rubidium dihydrogen arsenate ...	97
Tolerances for constructional parameters of Huygenian & Ramsden eyepiece systems ...	538	Rubidium fluoride phosphor: Luminescence behaviour of uranium activated rubidium fluoride phosphor ...	580
RAMA MURTY, V. see PURNACHANDRA RAO, B. ...	339	RUDRA WARRIAR, M. K.: Force constants & Coriolis coupling constants of some linear AXYZ type molecules ...	469
RAMA RAO, C. G.: The near ultraviolet absorption spectrum of 4-fluoro-3-chloro aniline ...	229	RUKMINI RAO see PADMAVATHI, S. V. ...	154
RAMA RAO, M. T.: Half-life of the 181 keV. level of ⁹¹ Tc ...	553	RUSIA, K. C.: On certain asymmetric mixed boundary value problems of an electrified circular disc situated inside a coaxial infinite hollow cylinder ...	44
RAMA RAO, P. V. S. see SRIRAMA RAO, M. ...	377	Ruthenium(III) acetylacetonate: Magnetic anisotropy of ruthenium(III) acetylacetonate ...	596
RAMABRAHMAN, K.: Ultrasonic velocity & allied parameters in aqueous solutions of lithium salts ...	75	Rutile (TiO ₂): Dielectric properties of thoroughly reduced rutile (TiO ₂) single crystals ...	328
Ultrasonic velocity & allied parameters in non-aqueous solutions of a few lithium salts ...	422		
RAMACHANDRA RAO, B. see JAGATH KUMAR, V. R. ...	319		
see KESAVA RAO, P. S. ...	149		
RAMAKRISHNA RAO, C. V. see SRIRAMA RAO, M. ...	377		
RAMAKRISHNA RAO, K. S.: Anomalous variation of dielectric properties of carboxylic acid-water mixtures ...	430		
Dielectric dispersion in <i>o</i> - & <i>m</i> -hydroxy anilines ...	426		
RAMALINGA REDDY, A.: Incoherent scattering of 1002 keV. gamma rays by <i>K</i> -shell electrons in Sn, Sm, Ta & Pb ...	255		
RAMAMURTY, V. V. see RAMA RAO, M. T. ...	553		
		Si: Matrices of Γ ₆ , Γ ₇ & Γ ₈ representations with valence band eigen functions of Ge or Si as basis functions ...	399
		Sm: Incoherent scattering of 1002 keV. gamma rays by <i>K</i> -shell electrons in Sn, Sm, Ta & Pb ...	255
		Sn: Incoherent scattering of 1002 keV. gamma rays by <i>K</i> -shell electrons in Sn, Sm, Ta & Pb ...	255

	PAGE		PAGE
SAND: Trombay automatic diffractometers: A semi-automatic neutron diffractometer (SAND) ...	550	SHAH, H. S.: Optical transmission through dispersions of graphite in a magnetic field ...	282
SADGURU PRAKASH: Luminophors with two-band electroluminescence emission ...	78	see DAVE, M. J. ...	364
SAHA, MADHUSUDAN: Magnetic anisotropy of ruthenium(III) acetylacetonate ...	596	SHAH, R. G. see CHIPLONKAR, V. T. ...	128
SAHA, N. K.: A simple form of high voltage stabilizer ...	192	SHARMA, B. B.: Thermoelectric properties of Ag-doped manganese telluride ...	61
SAHAI, Y. see GHOSH, S. N. ...	146	SHARMA, D.: Decay & thermoluminescence of zirconium-activated strontium sulphide phosphors ...	346
SAHOO, H. K. see GUPTA, U. C. ...	354	Franc-Condon factors & ν -centroids for the $C \rightarrow X$ band system of the ^{12}CH molecule ...	443
SAKKU, (Miss) S. see RAJESWARA RAO, N. ...	4	see ANSARI, B. J. ...	614
SAMBASIVA RAO, N. V.: Slow stationary viscous flow past a surface of revolution of Booth's lemniscate ...	40	see SRIVASTAVA, V. P. ...	617
SAMBASIVA RAO, P. see PURUSHOTHAM, G. ...	382	SHARMA, H. D. see KATTI, M. R. ...	458
Sandstones: Computation of thermal conductivity of sandstones by considering them as unconsolidated sands ...	388	SHARMA, K. V. see PANT, D. D. ...	236
SANTHAMMA, C. see RAMA RAO, C. G. ...	229	SHARMA, S.: Higher order thermal diffusion of electrons in ionized gases ...	329
SANWAL, D. N.: Luminescence behaviour of uranium activated rubidium fluoride phosphor ...	580	SHARMA, S. K. see MALHOTRA, G. L. ...	518
SANYAL, NITISH K. see SRIVASTAVA, V. P. ...	617	see PARSHAD, R. ...	207
SARKAR, B.: A method for nonlinear control system design ...	569	SHARMA, S. R.: The impedance of a cylindrical plasma capacitor ...	464
A paper & pencil design technique for a class of control systems ...	572	Shell model: Dispersion curves of sodium chloride on the basis of the simple shell model ...	670
The correlation measure between the responses of two linear systems for transient input as a performance criterion for servomechanisms ...	564	SHIRALKAR, V. P. see ROY-CHOUDHURY, PHANIBHUSAN ...	591
SARMA, K. S.: Radial deformations in a compressible dielectric sphere ...	37	Short wave fading records: $P'-f_0$ curve from short wave fading records near maximum usable frequency ...	708
SARMA, M. S. R. S. see PRASAD, J. ...	29	SHUKLA, J. P.: Microwave absorption of mixtures of dipolar liquids in solutions ...	492
SAROJINI, G.: Study of hydrogen-bonded complexes in three mixtures from dielectric measurements ...	558	SHUKLA, R. K.: Cellular structure in tin single crystals ...	252
SASTRY, G. L. N.: Ultrasonic parameters in mixed salt solutions ...	637	SIKAND, M. S. see KHANNA, K. M. ...	390
SASTRY, P. V.: On the thermal expansion & melting of ionic solids ...	672	Silicon crystals: Growth of silicon filamentary crystals from solution ...	576
SASTRY, V. K. S. CH. see SASTRY, G. L. N. ...	637	SINGH, D. V. see RAJAGOPALA RAO, P. ...	452
SATINDER KUMAR see SAHA, N. K. ...	192	SINGH, I. S. see SINGH, V. B. ...	81, 682
SATYAVATI, (Mrs) A. V.: Evaluation of apparent molal expansibility from apparent molal volume ...	248	see SRIVASTAVA, M. P. ...	519
SAXENA, B. K. see NARASIMHAN, V. ...	100	SINGH, N. L. see SINGH, S. N. ...	488
SAXENA, J. P. see TANDON, S. P. ...	694	see THAKUR, G. ...	575
SAXENA, M. C. see SHUKLA, J. P. ...	492	SINGH, O. N. see SRIVASTAVA, M. P. ...	519
SAXENA, S. C. see LACHMAN DASS ...	102	SINGH, P. D.: Electronic absorption spectra of three isomeric chlorobenzotrifluorides ...	205
see TONDON, P. K. ...	475	see SHARMA, D. ...	443
SAXENA, V. K. see NAIN, V. P. S. ...	471	SINGH, R. D.: On the emission & absorption spectra of β -fluoronaphthalene vapour ...	398
Scattering: Incoherent scattering of 1002 keV. gamma rays by K-shell electrons in Sn, Sm, Ta & Pb ...	255	SINGH, R. N. see TOLPADI, S. K. ...	176
Intensity-dependent frequency shift in scattering of electromagnetic waves by free electrons: Part II—Quantum theory ...	109	SINGH, R. S.: Sensitized emission spectra of quinones ...	91
On scattering by modified Gaussian potential ...	674	see SINGH, S. NATH ...	187, 454
Polarization dependence of elastic lepton (antilepton) nucleon electromagnetic scattering ...	58	SINGH, S. N.: Infrared absorption spectra of <i>o</i> - & <i>m</i> -chlorotoluenes ...	488
Scattering cross-sections of gamma rays in copper ...	254	SINGH, S. NATH: Absorption spectrum of 1,4-naphthoquinone in the vapour phase ...	187
Scattering factor in nuclear emulsions ...	645	Infrared spectra of some chloroanthraquinone derivatives ...	454
SEETHALAKSHMY, S.: PMR in dibarium zinc formate tetrahydrate $ZnBa_2(HCOO)_4 \cdot 4H_2O$...	413	see THAKUR, G. ...	575
PMR of zinc acetate dihydrate $Zn(CH_3COO)_2 \cdot 2H_2O$...	259	SINGH, S. P.: Dependence of vibrational frequency of diatomic molecules on electronegativity ...	386
Semiconducting properties: Study on semiconducting properties of vacuum deposited tellurium films ...	416	Emission spectrum of BiI molecule ...	445
Semiconductors: Theory of field dependent mobility in semiconductors ...	401	Emission spectrum of PbBr molecule ...	384
Semiconductors, degenerate: A laser method for determining the band-tail spreading energy in degenerate semiconductors ...	249	Emission spectrum of the <i>A-X</i> system of BiBr molecule ...	299
SEN, SUSIL KUMAR: A variable inductive element of infinite Q ...	47	see MATHUR, V. K. ...	517
SEN GUPTA, N. D.: On the solution of the Dirac equation in a magnetic field ...	459	SINGH, V. B.: Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -bromobenzaldehydes ...	81
SEN ROY, N.: Dual input null networks utilizing RC ladders ...	647	Vibrational spectra of the three isomeric tolu-aldehydes ...	682
SEQUEIRA, A. see CHIDAMBARAM, R. ...	550	SINGH, VIJAI BAHADUR see SADGURU PRAKASH ...	78
Servomechanisms: The correlation measure between the responses of two linear systems for transient input as a performance criterion for servomechanisms ...	564	SINGHAL, N. C. see SURI, K. K. ...	50
SESHAGIRI RAO, A.: Calculation of electron spin densities in certain methyl radicals ...	213	Single crystal: Cellular structure in tin single crystals Dielectric properties of thoroughly reduced rutile (TiO_2) single crystals ...	328
SESHAGIRI RAO, T.: Ultrasonic relaxation in mixtures of oxygen with carbon dioxide & benzene ...	322	Explanation of photocurrents in rutile (TiO_2) single crystal based on the field emission concept ...	598
SETH, R. K. see PRASAD, J. ...	29	Temperature gradient for the growth of large single crystals of naphthalene ...	96
		SINHA, A. P. B. see SINHA, K. P. ...	105
		SINHA, K. P.: On the quadrupole splitting of Mössbauer spectra in ferro-spinels ...	105
		see KRISHNAMURTHY, B. S. ...	401
		see UPADHYAYA, U. N. ...	546
		SIVARAMA SASTRY, G. see VENKATESHWARLU, M. ...	393
		SOBHANADRI, J. see HARIHARAN, N. ...	73
		Sodium: Calculation of the frequency distribution function & the specific heat for sodium & potassium ...	93

- Sodium chloride: Dispersion curves of sodium chloride on the basis of the simple shell model ... 670
- Sodium sulphamates: Raman & infrared spectra of sodium & calcium sulphamates ... 686
- Sodium sulphate: Colour centre studies in certain alkali sulphate crystals: Part I—Optical absorption in irradiated sodium sulphate ... 73
- Sodium trihydroselenite: Thermal expansion & ferroelectric transition in sodium trihydroselenite [$\text{NaH}_2(\text{SeO}_3)_2$] ... 542
- Soil-gas: A closed circuit technique for the measurement of radon/thoron ratio in soil-gas ... 33
- Solids: Proton resonance study of the effects of methyl groups substitution & their reorientations in some solids ... 678
- Solids, ionic: On the thermal expansion & melting of ionic solids ... 672
- Solvent effect: Intensity & solvent effect on absorption spectra of some anhydro salts ... 694
- Soop, P. M.: Scattering factor in nuclear emulsions ... 645
- Soonawala, M. F.: Viscosity of water ... 225
- SOUNDALGEKAR, V. M.: Heat transfer in crossed-fields MHD Couette flow ... 326
- Specific heat: Calculation of the frequency distribution function & the specific heat for sodium & potassium ... 93
- Spectra of N_2 excited by proton bombardment ... 146
- Spectra of *p*-chlorobenzonitrile ... 84
- Spectrometer, beta ray: Design, construction & performance of a flat type magnetic beta ray spectrometer ... 354
- Spectrometer, coincidence: Delayed coincidence spectrometer for lifetime studies ... 358
- Spin assignment to some levels of ^{115}In ... 50
- Split flux method: The internal reflected component of daylight: A finite difference approach to the split flux method ... 100
- Spread F: Latitude variation of times of maximum $h'F$ & spread F occurrences ... 319
- SRINIVASA RAO, B. N. *see* KESAVA RAO, B. ... 194
- SRINIVASACHARI, E. *see* SESHAGIRI RAO, T. ... 322
- SRINIVASAN, P.: Experimental investigation of subharmonics or frequency demultiplication in physical systems ... 499
- SRINIVASAN, R. *see* SEETHALAKSHMY, S. ... 259, 413
- see* THYAGARAJA RAO, S. ... 523
- SRINIVASAN, V. *see* RIESZ, R. P. ... 280
- SRIRAMA RAO, M.: Visual meteoric activity over Waltair—Survey during November, December & January 1964-67 ... 377
- SRIVASTAVA, B. B.: Characteristics of electrical noise on extra high voltage transmission lines & their measurement ... 434
- SRIVASTAVA, B. N. *see* PANT, D. D. ... 236
- SRIVASTAVA, G. P.: Absorption of microwaves in *cis*-1,2-dichloroethylene ... 14
- Dielectric relaxation in dilute polar liquids at microwave frequencies ... 561
- Dielectric relaxation in viscous solution of polar liquids at microwave frequencies ... 113
- see* MISRA, MAHESHWAR ... 304
- SRIVASTAVA, H. N.: Radio climatic charts over India during January & August ... 208
- Radio refractive index variations associated with monsoon depressions ... 244
- Refractivity in the lowest 1 km. over India ... 315
- SRIVASTAVA, K. G. *see* LAL, H. B. ... 598
- SRIVASTAVA, M. P.: Infrared spectrum of *p*-fluorostyrene ... 519
- Transport properties of plasma using shielded Lande potential ... 588
- SRIVASTAVA, P. *see* KHAN, M. Y. ... 166
- SRIVASTAVA, S. L.: Emission spectrum of *p*-fluorophenol ... 151
- SRIVASTAVA, SHYAM CHANDRA *see* SURESH CHANDRA
- SRIVASTAVA, V. P.: The electronic & infrared absorption spectra of β -bromophenotole ... 617
- Strain: Finite strain in transverse isotropic bodies ... 194
- Strontium sulphide phosphors: Decay & thermoluminescence of zirconium-activated strontium sulphide phosphors ... 346
- Strontium titanate: Thermal expansion of strontium titanate ... 714
- Structure factors: Effect of large number of heavy atoms in the distribution of structure factors of centric & acentric crystals ... 256
- Styrenes, methyl: Electronic spectra of isomeric methylstyrenes ... 614
- SUBBA RAO, K. *see* KRISHNAMURTY, T. ... 247
- Subharmonics: Experimental investigation of subharmonics or frequency demultiplication in physical systems ... 499
- SUBRAHMANYAM, B. *see* WAWRA, H. ... 577
- SUBRAHMANYAM, P. *see* RAGHUPATHI RAO, C. ... 638
- Suction: Forced convection in laminar flow between two parallel walls & in a circular pipe with suction ... 506
- Sulphur dicyanide: Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of sulphur dicyanide ... 126
- SUNDARA RAJAN, A.: Microwave spectrum of methanol- d_4 ... 641
- SUNTA, C. M. *see* NAMBI, K. S. V. ... 294
- Superconductors: The effect of one-body interactions on the transition temperature of superconductors ... 546
- Superfluid: Effective mass of alpha-particles in a superfluid nuclear matter ... 390
- SURESH CHANDRA: A new method for determining the relaxation time from polarizability plot: Part I—Nearly spherical molecules ... 116
- Viscosity dependence of relaxation times of 1,3-dibromopropane & 1,4-dibromobutane ... 700
- Surface layer of liquids: Thickness of the surface layer of liquids ... 517
- Surface states' relaxation times in *n*-type germanium ... 64
- SURI, K. K.: Spin assignment to some levels of ^{115}In ... 50
- SURYANARAYANA, M. *see* RAMABRAHMAN, K. ... 422
- SVOBODINA, (Mrs) O. V. *see* TAREEV, B. M. ... 715
- Symbolic addition method: Crystal structure of DL-aspartic acid by the symbolic addition method ... 523

- T**a: Incoherent scattering of 1002 keV. gamma rays by *K*-shell electrons in Sn, Sm, Ta & Pb ... 255
- ^{161}Tb : Decay schemes of ^{161}Tb & ^{163}Ru ... 605
- ^{99}Tc : Half-life of the 181 keV. level of ^{99}Tc ... 553
- Th: Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th ... 642
- TAKWALE, R. G. *see* KERIMOV, B. K. ... 58
- TALUKDAR, G. N. *see* DEKA, G. C. ... 479
- TANDON, (Mrs) KAMLA *see* TANDON, S. P. ... 386, 694
- TANDON, S. P.: Intensity & solvent effect on absorption spectra of some anhydro salts ... 694
- Ultraviolet absorption in arsenate ion in aqueous solution state ... 386
- TAREEV, B. M.: Polymerization studies of oligomers by electric conductivity measurements ... 715
- Tashkent: Polarization of 164 kc/s. radio wave transmissions from Tashkent received at Ahmedabad ... 7
- TATA, S. *see* BORLE, W. N. ... 576
- Tellurium films: Study on semiconducting properties of vacuum deposited tellurium films ... 416
- Tetrahedral XY_4 type molecules: Molecular constants of some tetrahedral XY_4 type molecules & their substituted derivatives by Green's function analysis ... 651
- TEWARI, S. G.: A closed circuit technique for the measurement of radon/thoron ratio in soil-gas ... 33
- TEWARY, VINOD K.: Calculation of the frequency distribution function & the specific heat for sodium & potassium ... 93
- THAKAR, JAWAHAR *see* RANADE, J. D. ... 209
- THAKUR, G.: Infrared absorption spectrum of 1-(chloromethyl) naphthalene ... 575
- Thermal conductivity: Computation of thermal conductivity of sandstones by considering them as unconsolidated sands ... 388
- Effective thermal conductivity of two-phase granular materials ... 274
- Thermal diffusion: Higher order thermal diffusion of electrons in ionized gases ... 329

Ultrasonic absorption in mixtures of non-associated liquids
Ultrasonic interferometer: A composite ultrasonic interferometer
Ultrasonic parameters in mixed salt solutions

INDEX

	PAGE		PAGE
Force field, mean square amplitudes of vibration & Coriolis coupling coefficients of <i>trans</i> -nitrous acid	521	Wasastjerna potential function: Applicability of the Wasastjerna potential function for evaluating physical parameters	171
Generalized mean square amplitudes & Coriolis coupling coefficients of C ₄ H ₈ , C ₄ D ₈ & C ₄ F ₈ ...	530	Water: Variation of proton relaxation time in carbonylic acid-water mixtures	292
Mean amplitudes of vibrations: Pyramidal XYZ ₃ type molecules	339	Viscosity of water	225
Vibrational frequency: Dependence of vibrational frequency of diatomic molecules on electronegativity	386	Water Cerenkov counter: Development of a water Cerenkov counter	634
Vibrational spectra: Vibrational & electronic spectra of 2-, 3- & 4-aminopyridines & deuterated analogues	104	Wave synchronization: Interrupted wave synchronization of pulsed oscillators	269
Vibrational & electronic spectra of isomeric bromostyrenes	49	WAWRA, H.: Comparison of the efficiency of different formulae in predicting elastic constants of polycrystals	577
Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -anisaldehyde molecules in liquid state	440		
Vibrational spectra of <i>o</i> -, <i>m</i> - & <i>p</i> -bromobenzaldehydes	81	X -ray diffraction studies of electrets of different thicknesses	98
Vibrational spectra of the three isomeric tolualdehydes	682	XY ₃ type molecules: Molecular force field for some XY ₃ type molecules	404
Vibrational transition probabilities & <i>r</i> -centroids of diatomic molecules: Band systems of CuCl ...	396	XY ₄ type molecules: Molecular constants of some tetrahedral XY ₄ type molecules & their substituted derivatives by Green's function analysis ...	651
VIJ, D. R.: Decay & thermoluminescence of CaS: Ce phosphor	67	XYZ ₃ type molecules: Mean amplitudes of vibrations: Pyramidal XYZ ₃ type molecules	339
Thermally stimulated currents in CaS: Ce phosphors	646		
<i>see</i> MATHUR, V. K.	517		
Viscoelastic fluid: Steady laminar flow of viscoelastic fluid through parallel & uniformly porous walls of different permeability	512	Y ADAVA, R. S.: Investigations on dielectric behaviour of acetone-chloroform & diethylether-chloroform mixtures at microwave frequencies	10
Viscosity: Calculation of viscosities of mixtures containing polar gases	475	YAGNIK, C. M.: Charge distribution in the mixed oxide systems: ZnMn _x Fe(2- <i>x</i>)O ₄ & CoMn _x Fe(2- <i>x</i>)O ₄ ...	211
Viscosity dependence of relaxation times of 1,3-dibromopropane & 1,4-dibromobutane	700	YAMANOVA, (Mrs) L. V. <i>see</i> TAREEV, B. M. ...	715
Viscosity of water	225		
Viscous flow: Slow stationary viscous flow past a surface of revolution of Booth's lemniscate ...	40	Z nMn _x Fe(2- <i>x</i>)O ₄ : Charge distribution in the mixed oxide systems: ZnMn _x Fe(2- <i>x</i>)O ₄ & CoMn _x Fe(2- <i>x</i>)O ₄ ...	211
VISWESWARA RAO, V.: Effective atomic numbers of alloys for pair production process	642	Zenith sky: Some comments on the accuracy of the estimated temperature distribution in the upper atmosphere from the intensity measurements of zenith sky during twilight	456
Photoelectric cross-sections of gamma rays in La, Gd, Hf & Th	642	Zinc acetate dihydrate: PMR of zinc acetate dihydrate Zn(CH ₃ COO) ₂ ·2H ₂ O	259
Voltage stabilizer: A simple form of high voltage stabilizer	192	Zinc sulphide: Photo-dielectric effect in zinc sulphide film doped with Cu & Cl	289
		Zirconium-activated phosphors: Decay & thermoluminescence of zirconium-activated strontium sulphide phosphors	346
W altair: Effect of magnetic activity on horizontal drifts in the F ₂ -region at Waltair	149		
Visual meteoric activity over Waltair—Survey during November, December & January 1964-67	377		
WARYAM SINGH <i>see</i> CHAUDHARY, H. R. ...	197		

U. of ILL. LIBRARY

NOV 4 1969

CHICAGO CIRCLE